II. AMENDMENT TO THE CLAIMS

Amendment to the Claims

[C1] (Previously presented) A neural implant comprising a device coated with a carbon nanofiber material.

[C2] (Previously presented) A neural implant comprising a device, wherein at least one component of the device is made of a carbon nanofiber material.

[C3] (Currently amended) The neural implant of claim 2 ~~3~~, wherein the carbon nanofibers are about 2 to 200 nm in width.

[C4] (Currently amended) The neural implant of claim 3 ~~4~~, wherein the carbon nanofibers comprise carbon nanotubes.

[C5] (Currently amended) The neural implant of claim 4 ~~5~~, wherein the carbon nanotubes are functionalized.

[C6] (Previously presented) The neural implant of claim 5, wherein the carbon nanotubes are aligned.

[C7] (Currently amended) The neural implant of claim 2 ~~1~~, wherein the implant is a neural probe.

[C8] (Previously presented) The neural implant of claim 2, wherein the nanomaterial comprises a matrix selected from the group consisting of polyurethane, polymethacrylate, polyester, polyvinyl and any copolymers thereof.

[C9] (Previously presented) The neural implant of claim 2, wherein the implant is a neural probe.

[C10] (Previously presented) A neural prostheses comprising an implantable device with a composite polyurethane carbon nanotube, the device capable of stimulating neuronal growth and minimizing glial scar tissue formation.

[C11] (Currently amended) The neural prostheses of claim 10 ~~11~~, wherein the carbon nanotube comprises 2% to 100% of the composite.

[C12] (Currently amended) The neural prostheses of claim 10 ~~11~~, wherein the carbon nanotube forms a carbon nanofiber.

[C13] (Currently amended) The neural prostheses of claim 10 ~~13~~, wherein the carbon nanofiber is about 100 nm.

[C14] (Previously presented) Use of a neural implant that minimizes scar formation comprising:

(a) obtaining a neural implantable device;

(b) coating the implantable device with a nanomaterial; and

(c) securing the implantable device in the neural tissue.

[C15] (Previously presented) Use of a neural implant that minimizes scar formation comprising:

(a) obtaining a neural implantable device comprising a nanomaterial; and

(b) securing the implantable device in the neural tissue.

[C16] (Previously presented) A method of stimulating neuronal growth and minimizing scar formation by an implant in a brain, the method comprising:

(a) obtaining a neural implantable device comprising a nanomaterial;

(b) securing the implantable device in the brain; and

(c) providing neuronal stimulants through the device.

[C17] (Previously presented) An orthopedic prostheses comprising an implantable device coated with a composite polyurethane carbon nanotube, the device capable of stimulating osteoblast proliferation and minimizing fibroblast encapsulation.

[C18] (Previously presented) A method of stimulating osteoblast proliferation and minimizing fibroblast encapsulation by an orthopedic implant, the method comprising:

(a) obtaining an orthopedic implantable device comprising a carbon nanofiber material; and

(b) securing the implantable device.

[C19] (Previously presented) A method of selecting a nanomaterial suitable for implant, the method comprising:

(a) determining structural dimensions of a biological molecule in a biological tissue; and

(b) fabricating the nanomaterial whose surface structural dimension is similar to the biological molecule.

[C20] (Previously presented) A method of claim 19 ~~20~~, wherein the nanomaterial comprises carbon nanofibers of about 2-200 nm in width.

(Previously presented) A method of claim 20, wherein the biological molecule is laminin.